



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Matthew J. Strickler
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David K. Paylor
Director
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Amy Thatcher Owens
Regional Director

July 31, 2020

Mr. Logan M. Thompson
Site Operations Manager
O-N Minerals (Chemstone) Company d/b/a Carmeuse Lime & Stone
Post Office Box 71
Strasburg, Virginia 22657
via email: logan.thompson@carmeusena.com

Facility: Carmeuse-Winchester Lime Plant
Location: Frederick County
Registration No.: 80504
Plant ID No.: 51-069-0078

Dear Mr. Thompson:

Attached is a Title V permit to operate your facility pursuant to 9VAC 5 Chapter 80 Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the permit dated April 22, 2014, as amended January 29, 2019.

In the course of evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on January 16, 2020 and solicited written public comments by placing a newspaper advertisement in the Winchester Star on May 14, 2020. The thirty-day required comment period, provided for in 9VAC 5-80-270 expired on June 15, 2020.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

This permit approval to operate shall not relieve O-N Minerals (Chemstone) Company of the responsibility to comply with all other local, state, and federal permit regulations.

To review any federal rules referenced in the attached permit, please refer to the website on which the US Government Publishing Office maintains the text of these rules: www.ecfr.gov, Title 40, Part 70.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact me at Janardan.Pandey@deq.virginia.gov or (540) 574-7817.

Sincerely,

A handwritten signature in cursive script that reads "Janardan R. Pandey". The signature is written in dark ink and is positioned above a horizontal line.

Janardan R. Pandey, P.E.
Air Permit Manager

Attachment: Permit

cc: David Taylor, DEQ Air Inspector
David St. Clair, Carmeuse Regional Environmental Manager
(David.Stclair@carmeusena.com)
DEQ OAPP – Susan Tripp
Associate Director, Air Permits Branch, Air & Radiation Division, US. EPA Region 3
File DEQ-VRO



COMMONWEALTH of VIRGINIA

Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9VAC5-80-50 through 9VAC5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: O-N Minerals (Chemstone) Company
Facility Name: Carmeuse-Winchester Lime Plant
Facility Location: 508 Quarry Lane
Frederick County, Virginia 22624
Registration Number: 80504
Permit Number: VRO80504

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act

August 1, 2020
Effective Date

July 31, 2025
Expiration Date


Deputy Regional Director

July 31, 2020
Signature Date

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Facility Information

Permittee

O-N Minerals (Chemstone) Company, d/b/a Carmeuse Lime & Stone
P.O. Box 71
Strasburg, Virginia 22657

Responsible Official

Logan M. Thompson
Site Operations Manager

Facility

Carmeuse-Winchester Lime Plant
508 Quarry Lane
Frederick County, Virginia 22624

Contact Person

David St. Clair
Senior Environmental Manager
(540) 465-6801

County Plant Identification No.: 51-069-80504

Facility Description: NAICS 32741 – Lime manufacturing

O-N Minerals (Chemstone) Company, d/b/a Carmeuse Lime & Stone, owns and operates a lime manufacturing facility located in Frederick County, 1.0 mile east of U.S. 11 on State Route 672, which is near Winchester, Virginia. DEQ and the company refer to this facility as the Carmeuse-Winchester Lime Plant. The basic processes at this facility are: (1) preparing limestone for the kilns by crushing and sizing; (2) calcining the limestone through one of two vertical lime kilns; (3) miscellaneous crushing, transfer, storage, handling, and loadout operations for the lime product; and (4) solid fuel storage and handling. The facility is subject to the following subparts in 40 CFR 60 and 63:

- 40 CFR 60 Subpart OOO: *Standards of Performance for Nonmetallic Mineral Processing Plants*
- 40 CFR 63, Subpart AAAAA: *National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants*

Emission Units

Equipment to be operated consists of:

Fuel-Burning Equipment

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description *	PCD ID	Pollutant Controlled	Applicable Permit Date
LP-VK-1	DC-VK-1	Lime Kiln #1 (Qualical Parallel Flow Regenerative Lime Kiln) (2016)	22 tons lime/hour (528 tons lime/day)	F. L. Smidth DC8-528-6-TA fabric filter baghouse (2016)	DC-VK-1	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
LP-VK-2	DC-VK-2	Lime Kiln #2 (Qualical Parallel Flow Regenerative Lime Kiln) (2016)	22 tons lime/hour (528 tons lime/day)	F. L. Smidth DC8-528-6-TA fabric filter baghouse (2016)	DC-VK-2	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
HU-13030	DC-13017	Solid Fuel Dryer (Air Heater)	3.5 MMBtu/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-13017	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only and is not an applicable requirement.

Aggregate and Precalcination Limestone Process

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
BC-51005	N/A	Belt Conveyor	500 tons limestone/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-51006	N/A	Belt Conveyor	300 tons limestone/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-51007	N/A	Belt Conveyor	300 tons limestone/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-07002	N/A	Belt Conveyor	170 tons limestone/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-07003	DC-07006	Belt Conveyor	170 tons limestone/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-07006	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-07004	DC-07006	Belt Conveyor	200 tons limestone/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-07006	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-07005	DC-07006	Belt Conveyor	200 tons limestone/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-07006	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-50003	N/A	Belt Conveyor	1,500 tons limestone/hr	N/A	N/A	N/A	4/22/2015, as amended 1/29/19
BN-07009	N/A	Storage Bin	120 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-07006	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19

BN-07010	N/A	Bin	120 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-07006	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
CR-51025	N/A	Roller Crusher	250 tons limestone/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SN-51027	N/A	Screen	500 tons limestone/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SN-07035	DC-07006	Screen	170 tons limestone/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-07006	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-51001	N/A	Belt Conveyor	500 tons limestone/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-51002	N/A	Belt Conveyor	580 tons limestone/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-07044	N/A	Skip Hoist	200 tons limestone/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-07045	N/A	Skip Hoist	200 tons limestone/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SC-07047	N/A	Screw Conveyor	10 tons limestone/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	N/A
BN-07037	DC-07006	Reject Stone Fines Bin	65 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-07006	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SP-07040	DC-07006	Loadout Spout (Reject Stone)	150 tons limestone/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-07006	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only and is not an applicable requirement.

Lime Finishing and Loadout Process

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
BC-06040	DC-06037 & DC-06016	Belt Conveyor	100 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06037 & DC-06016	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-06006	DC-06014 & DC-06016	Belt Conveyor	100 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06014 & DC-06016	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-06007	DC-06015 & DC-06016	Belt Conveyor	100 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06015 & DC-06016	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-06008	DC-06047	Belt Conveyor	100 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06047	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-06011	DC-06047	Belt Conveyor	100 tons lime/day	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06047	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-24011	DC-24035	Belt Conveyor	200 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24035	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-24012	DC-24035	Belt Conveyor	200 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24035	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-24013	DC-24035	Belt Conveyor	200 tons lime/day	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24035	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-24014	DC-24038	Belt Conveyor	200 tons lime/day	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24038	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19

BN-06030	DC-06015	Reject Lime Bin	280 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06015	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SP-24023	N/A	Loadout Spout (Reject Lime)	150 tons lime/hr	N/A	N/A	N/A	4/22/2014, as amended 1/29/19
BN-24001	DC-06017	Lime Storage Silo	2,000 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06017	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-24002	DC-06017	Lime Storage Silo	2,000 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06017	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-24003	DC-06017	Lime Storage Silo	1,500 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06017	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-24004	DC-06017	Lime Storage Silo	1,500 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06017	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
CR-06031	DC-06014	Roller Crusher	100 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06014	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SN-06033	DC-06014	Screen	100 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06014	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-06050	DC-06014	Bin	50 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06014	PM, PM ₁₀ , PM _{2.5}	N/A
BN-06051	DC-06014	Bin	50 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06014	PM, PM ₁₀ , PM _{2.5}	N/A
BN-20001	DC-24044	Storage Silo	165 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19

BN-20002	DC-24044	Storage Silo	165 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-20003	DC-24044	Storage Silo	165 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-20004	DC-24044	Storage Silo	165 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-20006	DC-24044	Storage Silo	165 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-20008	DC-24044	Storage Silo	165 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-20010	DC-24044	Re-crush Surge Bin	20 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-20011	DC-24044	Lime Storage Silo	165 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-20012	DC-24044	Lime Storage Silo	165 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-24015	DC-24044	36" Belt Conveyor	200 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-24019	DC-24044	Belt Conveyor	150 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-24021	DC-24044	24" Belt Conveyor	150 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19

BC-24029	DC-24044	24" Belt Conveyor	150 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-20082	DC-24047	36" Belt Conveyor	200 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24047	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-20054	DC-24047	24" Belt Conveyor	50 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24047	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-20051	DC-20076	36" Belt Conveyor	200 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-20076	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-20052	DC-20076	36" Belt Conveyor	200 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-20076	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-20053	DC-20084	Belt Conveyor	200 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-20084	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SC-20033	N/A	16" Screw Conveyor	150 tons lime/hr	N/A	N/A	N/A	4/22/2014, as amended 1/29/19
BE-24050	DC-24047	Bucket Elevator	5 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24047	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SN-24016	DC-24044	Midwestern Screen (MEV 510-5)	200 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SN-24017	DC-24044	Screen	150 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24044	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
CR-20074	DC-24035	Jeffery Crusher (30 Flextooth)	50 tons lime/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-24035	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19

SP-24023	N/A	Loadout Spout	150 tons lime/hr	N/A	N/A	N/A	4/22/2014, as amended 1/29/19
SP-06035	DC-06015	Loadout Spout	N/A	IAC (Industrial Accessories Company) fabric filter baghouse	DC-06015	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SP-06068	DC-20084	12" Diameter Bayshore Loadout Spout	200 tons/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-20084	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SP-06069	DC-20076	12" Diameter Bayshore Loadout Spout	200 tons/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-20076	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SP-06070	DC-20076	12" Diameter Bayshore Loadout Spout	200 tons/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-20076	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only and is not an applicable requirement.

Solid Fuel Handling Equipment

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
CFR-13012	DC-13017	Dynamic Classifier	7 tons solid fuel/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-13017	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
SC-903	DC-13017	Screw Conveyor	7 tons solid fuel/hr	N/A	DC-13017	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BN-13045	DC-13017	Solid Fuel Bin	50 tons	N/A	DC-13017	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19

BN-13004	DC-13005	Solid Fuel Bin	85 tons	IAC (Industrial Accessories Company) fabric filter baghouse	DC-13005	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-13002	N/A	Belt Conveyor	100 tons solid fuel/hr	N/A	N/A	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
BC-13003	DC-13005	Belt Conveyor	100 tons solid fuel/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-13005	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19
CR-13013	DC-13017	Solid Fuel Milling	7 tons solid fuel/hr	IAC (Industrial Accessories Company) fabric filter baghouse	DC-13017	PM, PM ₁₀ , PM _{2.5}	4/22/2014, as amended 1/29/19

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only and is not an applicable requirement.

Fuel Burning Equipment Requirements - Lime Kilns and Solid Fuel Dryer

1. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) – Limitations:** Nitrogen oxides (NO_x) emissions from each vertical kiln shall be controlled by good combustion practices.
(9VAC5-80-110 and Condition 1 of the 1/29/19 PSD Permit)
2. **Fuel Burning Equipment Requirements – Solid Fuel Dryer (HU-13030) - Limitations –** Emissions of nitrogen oxides from the natural gas-fired solid fuel dryer shall be controlled by low-NO_x burners. The low-NO_x burners shall be provided with adequate access for inspection.
(9VAC5-80-110 and Condition 56 of the 1/29/19 PSD Permit)
3. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) – Limitations:** Carbon monoxide (CO) emissions from each vertical kiln shall be controlled by good combustion practices.
(9VAC5-80-110 and Condition 2 of the 1/29/19 PSD Permit)
4. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) – Limitations:** Carbon dioxide (CO₂) emissions from each vertical kiln shall be controlled by good combustion practices, including the optimization of combustion air and flue gas to maximize combustion efficiency.
(9VAC5-80-110 and Condition 3 of the 1/29/19 PSD Permit)
5. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) – Limitations:** Sulfur dioxide (SO₂) emissions from each vertical kiln shall be controlled by inherent dry scrubbing.
(9VAC5-80-110 and Condition 4 of the 1/29/19 PSD Permit)
6. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) – Limitations:** Particulate emissions from each vertical kiln shall be controlled by individual fabric filter baghouses. Each fabric filter baghouse shall be provided with adequate access for inspection.
(9VAC5-80-110 and Condition 5 of the 1/29/19 PSD Permit)
7. **Fuel Burning Equipment Requirements – Solid Fuel Dryer (HU-13030) – Limitations:** Particulate emissions from the solid fuel dryer shall be controlled by fabric filter baghouse (DC-13017). The fabric filter baghouse shall be provided with adequate access for inspection and shall be in operation when the associated equipment is operating.
(9VAC5-80-110 and Condition 55 of the 1/29/19 PSD Permit)
8. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 & LP-VK-2) – Limitations -** Volatile Organic Compound (VOC) emissions from each vertical kiln shall be controlled by good combustion practices.
(9VAC5-80-110 and Condition 100 of the 1/29/19 Minor NSR Permit)

9. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) – Limitations:** The approved fuels for lime kilns are coal, petroleum coke, and natural gas. Use of a different fuel may require a permit to modify and operate.
(9VAC5-80-110 and Condition 19 of the 1/29/19 PSD Permit)
10. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) – Limitations:** The only approved fuel for cold startups for the lime kilns is natural gas. A cold startup of either lime kiln is defined as the use of the startup burners that are located within the kiln's crossover channel when: (i) no fuel has been fired in the kiln within the preceding 72 hours, and (ii) the temperature in the crossover channel is below 1100 degrees Fahrenheit. Once begun, a cold startup ends when: (i) the temperature in the crossover channel exceeds 1100 degrees Fahrenheit; (ii) the start up burners are no longer fired; and (iii) the main burners (lances) begin firing.
(9VAC5-80-110 and Condition 20 of the 1/29/19 PSD Permit)
11. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Limitations** – The fuels to be burned in the kilns shall meet the specifications below:

NATURAL GAS:

Maximum sulfur content:	0.5 gr/100 scf
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COAL:

Minimum heat content per shipment:	5,000 BTU/lb HHV
Minimum average annual heat content:	6,100 BTU/lb HHV
Maximum sulfur content per shipment:	3.0%

PETROLEUM COKE:

Minimum heat content per shipment:	11,900 BTU/lb HHV
Minimum average annual heat content:	12,100 BTU/lb HHV
Maximum sulfur content per shipment:	7.0%

(9VAC5-80-110 and Condition 21 of the 1/29/19 PSD Permit)

12. **Fuel Burning Equipment Requirements – Solid Fuel Dryer (HU-13030) - Limitations** – The approved fuel for the natural gas-fired solid fuel dryer is natural gas. A change in the fuel may require a permit to modify and operate.
(9VAC5-80-110 and Condition 57 of the 1/29/19 PSD Permit)
13. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Limitations** – The permittee shall obtain a certification from the fuel supplier with each shipment of coal and petroleum coke to be burned in the kilns. Each fuel supplier certification shall include the following:

- a. Coal

- i. The name of the fuel supplier;
 - ii. The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);
 - iii. The date on which the coal was shipped;
 - iv. The weight of coal delivered in the shipment;
 - v. The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content;
 - vi. The methods used to determine the properties of the coal; and
 - vii. A statement that the sampling methods comply with ASTM D6883 "Standard Practice for Manual Sampling of Stationary Coal from Railroad Cars, Barges, Trucks, or Stockpiles".
- b. Petroleum Coke
- i. The name of the fuel supplier;
 - ii. The location of the coke when the sample was collected for analysis to determine the properties of the coke, specifically including whether the coke was sampled as delivered to the facility or whether the sample was collected from a coke preparation plant, at a coke supplier's facility, or at another location. The certification shall include the name of the coke preparation plant, coke storage facility, or other location where the sample was collected;
 - iii. The date on which the coke was shipped;
 - iv. The weight of coke delivered in the shipment;
 - v. The results of the analysis of the coke from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content;
 - vi. The methods used to determine the properties of the coke; and

- vii. A statement that the sampling methods comply with ASTM D6883 “Standard Practice for Manual Sampling of Stationary Coal from Railroad Cars, Barges, Trucks, or Stockpiles”.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 11. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9VAC5-80-110 and Condition 22 of 1/29/19 PSD Permit)

14. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) - Limitations** - The annual production of lime from each of the lime kilns shall not exceed 157,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. This production is limited to a combined total throughput of 596,600 tons of limestone feed for both kilns per year, calculated monthly as the sum of each consecutive 12-month period. (9VAC5-80-110 and Condition 18 of the 1/29/19 PSD Permit)
15. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) - Limitations** - Emissions from the operation of each of the lime kilns while burning only natural gas shall not exceed the limits specified below:

Pollutant	lb/hr	lb/ton lime
PM ₁₀ (filterable & condensable)	6.84	0.31
PM _{2.5} (filterable & condensable)	5.50	0.25
Sulfur Dioxide	1.32	0.06
Oxides of Nitrogen (as NO ₂)	22.83	1.04
Carbon Monoxide	28.77	1.31

Short-term emission limits for PM₁₀ and PM_{2.5} shall be calculated as averages for three-hour sampling periods; short-term emission limits for sulfur dioxide, nitrogen oxides, and carbon monoxide shall be calculated as one-hour averages.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these limits may be determined as stated in Conditions 9, 11, 14, 42, 43, and 44.

This permit may be changed, in accordance with 9VAC5-80-1925, to reduce these emission limits based on results from stack testing as required in Conditions 42, 43, and 44. (9VAC5-80-110 and Condition 24 of the 1/29/19 PSD Permit)

16. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) - Limitations** - Emissions from the operation of each of the lime kilns while burning coal or petroleum coke shall not exceed the limits specified below:

Pollutant	lb/hr	lb/ton lime
PM ₁₀ (filterable & condensable)	7.16	0.33
PM _{2.5} (filterable & condensable)	5.50	0.25
Sulfur Dioxide	28.60	1.30
Oxides of Nitrogen (as NO ₂)	46.95	2.13
Carbon Monoxide	66.00	3.00

Short-term emission limits for PM₁₀ and PM_{2.5} shall be calculated as averages for three-hour sampling periods; short-term emission limits for sulfur dioxide, nitrogen oxides, and carbon monoxide shall be calculated as one-hour averages.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these limits may be determined as stated in Conditions 9, 11, 14, 42, 43, and 44.

This permit may be changed, in accordance with 9 VAC 5-80-1925, to reduce these emission limits based on results from stack testing as required in Conditions 42, 43, and 44.

(9VAC5-80-110 and Condition 25 of the 1/29/19 PSD Permit)

17. **Fuel Burning Equipment Requirements – Solid Fuel Dryer (HU-13030) - Limitations** – Emissions from the operation of the natural gas-fired solid fuel dryer shall not exceed the following limits:

Pollutant	Hourly Emissions (lb/hr)	Annual Emissions (tons)
Oxides of Nitrogen (as NO ₂)	0.17	0.8
Carbon Monoxide	0.29	1.3

These emissions are derived from the estimated overall emission contribution from operating limits. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 2, 12, and 55.

(9VAC5-80-110 and Condition 62 of the 1/29/19 PSD Permit)

18. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) - Limitations** - Emissions from the operation each of the lime kilns shall not exceed the limits specified below:

Pollutant	tons/year
Total PM (filterable only)	11.3
PM ₁₀ (filterable & condensable)	25.6
PM _{2.5} (filterable & condensable)	19.9
Sulfur Dioxide	102.2
Oxides of Nitrogen (as NO ₂)	167.5
Carbon Monoxide	238.3
Greenhouse Gases (expressed as CO ₂ e)	181,005

This permit may be changed, in accordance with 9VAC5-80-1925, to reduce these emission limits based on results from stack testing as required in Conditions 42, 43, and 44.

Annual emission limits are derived from the estimated overall emission contribution from operating limits, including periods of startup and shutdown. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these limits may be determined as stated in Conditions 9, 11, 14, 42, 43, and 44.

(9VAC5-80-110 and Condition 26 of the 1/29/19 PSD Permit)

19. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) - Limitations** - Particulate Matter (PM) emissions from each lime kiln shall not exceed 0.08 pounds per ton of stone feed (lb/tsf), which is equivalent to 0.010 gr/dscf when firing solid fuel, or 0.009 gr/dscf when firing natural gas. PM₁₀ emissions from each kiln shall not exceed 0.010 gr/dscf (filterable) when firing solid fuel, or 0.009 gr/dscf when firing natural gas. PM_{2.5} emissions from each kiln shall not exceed 0.004 gr/dscf (filterable) when firing solid fuel or natural gas.
(9VAC5-80-110, 40 CFR 63.7090(a), Table 1 of 40 CFR 63 Subpart AAAAA and Condition 23 of the 1/29/19 PSD Permit)
20. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) - Limitations** - Each lime kiln shall not use more than 3.65 MMBtu (HHV) of fuel per ton of lime produced (excluding fuel consumed during startup, shutdown, and malfunction). Heat input per ton of lime produced shall be calculated monthly using the fuel and product monitoring data collected pursuant to Condition 30 and the fuel supplier data collected pursuant to Condition 13. Exceedance of the operating limits may be considered credible evidence of the exceedance of this heat input limit. Compliance with these limits may be determined as stated in Conditions 11 and 13.
(9VAC5-80-110, and Condition 27 of the 1/29/19 PSD Permit)

21. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) – Limitations** - Emissions from the operation of the each lime kiln, while burning any approved fuel, shall not exceed the following limits:

Pollutant	Short-Term Emission Limits (lb/hr)	Short-Term Emission Limits (lb/ton lime)	Annual Emission Limits (tpy)
Volatile organic Compounds (VOC)	3.55	0.16	13.0
Sulfuric Acid Mist (SAM)	0.89 (coke); 0.38 (coal)	0.04 (coke); 0.02 (coal)	3.2

The short-term emission limits represent averages for three-hour sampling periods.

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these limits may be determined as stated in Conditions 9, 10, and 14.

This permit may be changed, in accordance with 9VAC5-80-1925, to reduce these emission limits based on results from stack testing as required in Conditions 47 and 48. (9VAC5-80-110 and Condition 101 of the 1/29/19 Minor NSR Permit)

22. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) - Limitations** - Visible Emissions from each lime kiln baghouse stack (DCVK-1 and DCVK-2) shall not exceed five percent opacity as determined using 40 CFR 60, Appendix A, Method 9. (9VAC5-80-110, 40 CFR 63.7090(b), 40 CFR 63.7114(b), Table 2 of 40 CFR 63 Subpart AAAAA and Condition 28 of the 1/29/19 PSD Permit)
23. **Fuel Burning Equipment Requirements – Solid Fuel Dryer (HU-13030) - Limitations** - Visible emissions from the natural gas-fired solid fuel dryer shall not exceed five percent opacity as determined by 40 CFR 60, Appendix A, Method 9. (9VAC5-80-110 and Condition 64 of the 1/29/19 PSD Permit)
24. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Limitations** – The permittee shall develop and implement a written startup, shutdown, and malfunction plan (SSMP) for each vertical kiln according to the provisions in 40 CFR 63.6(e)(3). (9VAC5-80-110, 40 CFR 63.6(e)(3), 40 CFR 63.7100(e) and Condition 85 of the 1/29/19 PSD Permit)
25. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) – Monitoring** - Each lime kiln shall be equipped with a device for measuring the feed rate of

limestone. Each measuring device used shall be calibrated and maintained according to manufacturer's instruction and shall be accurate to within plus or minus five percent of the mass rate over its operating range.

(9VAC5-80-110, 40 CFR 63.7112, 40 CFR 63.7114(b), Table 4 of 40 CFR 63 Subpart AAAAA and Condition 17 of the 1/29/19 PSD Permit)

26. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) -**

Monitoring – The permittee shall install, calibrate, maintain, and operate a Continuous Opacity Monitoring System (COMS) to monitor and record the opacity from each vertical kiln, in accordance with 40 CFR Part 63, Subpart A (General Provisions) and Performance Specification (PS)-1 of Appendix B to 40 CFR Part 60.

(9VAC5-80-110, 40 CFR 63.7113(g), 40 CFR 63.7114(b), and Condition 6 of the 1/29/19 PSD Permit)

27. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) –**

Monitoring – A continuous emission monitoring system (CEMS) shall be installed to measure and record the emissions of SO₂ in pounds per hour from each vertical kiln. The CEMS for SO₂ shall be installed, calibrated, maintained, and operated according to the requirements of 9 VAC 5-50-40 and 40 CFR 60.13.

(9VAC5-80-110 and Condition 7 of the 1/29/19 PSD Permit)

28. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) –**

Monitoring – A CEMS quality control program which is equivalent to the requirements of 40 CFR 60.13 and 40 CFR 60, Appendix F shall be implemented for the CEMS.

(9VAC5-80-110 and Condition 9 of the 1/29/19 PSD Permit)

29. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) -**

Monitoring – The permittee shall prepare and implement for each kiln a written combustion monitoring plan. The permittee shall submit the plan to DEQ for review and approval at least 90 days prior to the start-up of each kiln. Any subsequent changes to the plan must be submitted to DEQ for review and approval. Pending approval by DEQ of an initial or amended plan, the permittee shall comply with the provisions of the submitted plan. The plan shall contain the following information:

- a. Process and control device parameters to be monitored to determine compliance with NO_x, CO, and SO₂ emission limits and good combustion practices, along with established operating limits or ranges, as applicable, for each kiln.
- b. A monitoring schedule for each kiln.
- c. Procedures for the proper operation and maintenance of each kiln and each air pollution control device used to meet the applicable emission limitations in Conditions 15, 16, 18, and 19.

- d. Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance or good combustion practices, including:
 - i. Calibration and certification of accuracy of each monitoring device;
 - ii. Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems;
 - iii. Ongoing operation and maintenance procedures; and
 - iv. Ongoing data quality assurance procedures.
- e. Procedures for monitoring process parameters indicative of good combustion practices and control device parameters indicative of proper control device operation.
- f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the values identified in Condition 29a.
- g. A maintenance schedule for each kiln and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(9VAC5-80-110 and Condition 11 of the 1/29/19 PSD Permit)

30. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Monitoring** - The permittee shall install, operate, and maintain instrumentation to continuously monitor the fuel consumption and lime production for each vertical kiln. The instruments to monitor the fuel consumption and lime production from each vertical kiln shall be installed, maintained, and operated in accordance with manufacturers' specification. The same plant instruments used to monitor fuel consumption and lime production for accounting purposes shall be used in the monitoring of these parameters that are used to verify compliance with the fuel efficiency limitation in Condition 20.

(9VAC5-80-110 and Condition 12 of the 1/29/19 PSD Permit)

31. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Monitoring** – Each lime kiln baghouse (Ref. DC-VK-1 and DC-VK-2) shall be equipped with a device to continuously measure the differential pressure across the baghouse. Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the associated baghouse is operating.

(9VAC5-80-110 and Condition 13 of the 1/29/19 PSD Permit)

32. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Monitoring** – Differential pressure measurement devices across each lime kiln baghouse (Ref. DC-VK-1 and DC-VK-2) shall be equipped with audible alarms to detect operation outside of the high and low differential pressure levels suggested by the baghouse manufacturer. The alarm shall be set to sound each time the differential pressure falls outside the recommended range. Corrective action shall be taken each time the alarm is activated, such that the baghouse is returned to its recommended differential pressure range. The alarm system shall be configured and tested in accordance with approved procedures which shall include, as a minimum, common industry practices. The alarm system shall be in operation when any baghouse is operating.
(9VAC5-80-110 and Condition 14 of 1/29/19 PSD Permit)
33. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Monitoring** - The devices used to continuously measure the differential pressure across each baghouse (Ref. DC-VK-1 and DC-VK-2) shall be observed by the permittee not less than once per week of operation. If during the observation the differential pressure is not within the manufacturer's recommended range, timely corrective action shall be taken such that the baghouse resumes proper operation. The permittee shall continuously record measurements from the control equipment monitoring devices.
(9VAC5-80-110 and Condition 15 of 1/29/19 PSD Permit)
34. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Monitoring** – Process parameters indicative of good combustion practices for each kiln shall be monitored in accordance with the combustion monitoring plan required by Condition 29.
(9VAC5-80-110 and Condition 16 of 1/29/19 PSD Permit)
35. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 & LP-VK-2) – Monitoring** - The permittee shall prepare and implement for each kiln a written combustion monitoring plan for VOC. The permittee shall submit the plan to DEQ, for review and approval within 180 days of start-up of each kiln. Any subsequent changes to the plan must be submitted to DEQ, for review and approval. Pending approval by DEQ of an initial or amended plan, the permittee shall comply with the provisions of the submitted plan. The plan shall contain the following information:
- a. Process and control device parameters to be monitored to determine compliance with VOC emission limits and good combustion practices, along with established operating limits or ranges, as applicable, for each kiln.
 - b. A monitoring schedule for each kiln.
 - c. Procedures for the proper operation and maintenance of each kiln necessary to meet the applicable emission limitations in Condition 21.

- d. Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance or good combustion practices, including:
 - i. Calibration and certification of accuracy of each monitoring device;
 - ii. Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems;
 - iii. Ongoing operation and maintenance procedures; and
 - iv. Ongoing data quality assurance procedures.
- e. Procedures for monitoring process parameters indicative of good combustion practices and control device parameters indicative of proper control device operation.
- f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the values identified in Condition 35a.
- g. A maintenance schedule for each kiln and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(9VAC5-80-110 and Condition 102 of the 1/29/19 Minor NSR Permit)

36. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) – Monitoring** - For each COMS used to monitor an add-on air pollution control device, you must meet the following requirements.
- a. Install the COMS at the outlet of the control device.
 - b. Install, maintain, calibrate, and operate the COMS as required by 40 CFR 63 Subpart A, General Provisions and according to Performance Specification (PS)-1 of Appendix B to 40 CFR 60.

(9VAC5-80-110, 40 CFR 63.7090(b), 40 CFR 63.7113(g), 40 CFR 63.7114(b) and Table 2 to 40 CFR 63 Subpart AAAAA)

37. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) – Monitoring** – The permittee shall:
- a. Install, maintain, calibrate and operate a COMS as required by 40 CFR 63 Subpart A, General Provisions and according to PS-1 of Appendix B to 40 CFR 60, except as specified in 40 CFR 63.7113(g)(2); and

- b. Collect the COMS data at a frequency of at least once every 15 seconds, determining block averages for each six-minute period and demonstrating for each six-minute block period the average opacity does not exceed five percent.

(9VAC5-80-110, 40 CFR 63.7090(b), 40 CFR 63.7121 and Table 5 to 40 CFR 63 Subpart AAAAA)

38. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 & LP-VK-2) - Recordkeeping** - The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with DEQ. These records shall include, but are not limited to:

- a. The monthly and annual production of lime from each kiln, in tons. The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
- b. The number of hours of operation of each vertical lime kiln.
- c. The monthly and annual consumption of limestone kiln feed, in tons. Monthly consumption shall be calculated from records of each feed rate measuring device. The annual consumption shall be calculated monthly as the sum of each consecutive 12-month period.
- d. The daily, monthly, and annual throughput of coal and petroleum coke to the kilns, in tons. The annual consumption shall be calculated monthly as the sum of each consecutive 12-month period.
- e. The monthly and annual throughput of natural gas to the kilns, in million cubic feet. The annual consumption shall be calculated monthly as the sum of each consecutive 12-month period.
- f. The monthly and annual throughput of natural gas to the solid fuel dryer, in million cubic feet. The annual consumption shall be calculated monthly as the sum of each consecutive 12-month period.
- g. All fuel supplier certifications for natural gas, coal, and petroleum coke.
- h. Quarterly COMS opacity data from each lime kiln baghouse stack (Ref. DCVK-1 and DCVK-2).
- i. All data from the SO₂ CEMS.
- j. Results of all performance tests and visible emissions evaluations.

- k. A copy of each notification and report that was submitted to comply with the 40 CFR Part 63, Subpart AAAAAA, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements in 40 CFR 63.10(b)(2).
- l. The records in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
- m. The time, date, and duration of each startup and shutdown period for each vertical kiln.
- n. Records of performance tests, performance evaluations, and opacity and VE observations as required in 40 CFR 63.10(b)(2)(viii).
- o. Records in 40 CFR 63.6(h)(6) for VE observations.
- p. Records required by Tables 5 and 6 of 40 CFR Part 63, Subpart AAAAAA to show continuous compliance with each emission limitation that applies to the facility.
- q. Records which document the basis for the initial applicability determination as required under 40 CFR 63.7081.
- r. All other records required by 40 CFR 63 Subpart AAAAAA that are not described individually in this Condition.

These records shall be available for inspection by DEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Conditions 93 and 105 of the 1/29/19 NSR Permit)

39. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Testing** – Performance evaluations of the CEMS for SO₂ shall be conducted in accordance with 9 VAC 5-50-40 and shall take place during the performance tests required by Conditions 42 and 43 or within 30 days thereafter. One copy of the performance evaluation report shall be submitted to the DEQ within 45 days of the evaluation. The CEMS shall be installed and operational prior to conducting initial performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. A 30-day notification, prior to the demonstration of the CEMS' performance, and subsequent notifications shall be submitted to DEQ.
(9VAC5-80-110 and Condition 8 of the 1/29/19 PSD Permit)
40. **Fuel Burning Equipment Requirements – Lime Kilns (VP-LK-1 and VP-LK-2) - Testing** - Initial performance tests shall be conducted for PM from each lime kiln to determine compliance with the PM emissions limits contained in Condition 19. Separate tests shall be conducted on each kiln firing coal or petroleum coke, with a total of four

initial compliance tests required. The tests shall be performed within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of each fuel on each lime kiln. Tests shall be conducted and reported and data reduced as set forth in 9VAC5-50-30 and the test methods and procedures contained in 40 CFR Part 63, Subpart AAAAA. The performance tests shall include a test method performance audit, where applicable. The details of the tests are to be arranged with DEQ. The permittee shall submit a test protocol at least 60 days prior to testing. One copy of the test results shall be submitted to DEQ within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9VAC5-80-110, 40 CFR 63.7114(a) and Condition 30 of the 1/29/19 PSD Permit)

41. **Fuel Burning Equipment Requirements – Lime Kilns (VP-LK-1 and VP-LK-2) – Testing** – The permittee shall conduct a performance test for PM from each lime kiln to determine compliance with the PM emissions limits contained in Condition 19, within five years following the initial performance test required by Condition 40. Separate tests shall be conducted on each kiln firing coal or petroleum coke, with a total of four compliance tests required. Tests shall be conducted and reported and data reduced as set forth in 9VAC5-50-30 and the test methods and procedures contained in 40 CFR Part 63, Subpart AAAAA. The performance tests shall include a test method performance audit, where applicable. The details of the tests are to be arranged with DEQ. The permittee shall submit a test protocol at least 60 days prior to testing. One copy of the test results shall be submitted to DEQ within 60 days after test completion and shall conform to the test report format enclosed with this permit. The permittee shall conduct a performance test for PM within five years following each subsequent performance test thereafter. (9VAC5-80-110 and 40 CFR 63.7111)
42. **Fuel Burning Equipment Requirements – Lime Kilns (VP-LK-1 and VP-LK-2) - Testing** – Initial performance tests shall be conducted for PM₁₀, PM_{2.5}, NO_x, SO₂, and CO from each lime kiln to determine compliance with the emission limits contained in Conditions 16 and 19. All stack tests for PM₁₀ and PM_{2.5} shall include both filterable and condensable portions. Separate tests shall be conducted on each kiln firing coal or petroleum coke, with a total of four initial compliance tests required for each pollutant. The tests shall be performed within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of each fuel on each lime kiln. Tests shall be conducted and reported and data reduced as set forth in 9VAC5-50-30. The performance tests shall include a test method performance audit, where applicable. The details of the tests are to be arranged with DEQ. The permittee shall submit a test protocol at least 60 days prior to testing. One copy of the test results shall be submitted to DEQ within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9VAC5-80-110 and Condition 31 of the 1/29/19 PSD Permit)
43. **Fuel Burning Equipment Requirements – Lime Kilns (VP-LK-1 and VP-LK-2) - Testing** – An annual stack test shall be conducted on each lime kiln for PM, PM₁₀, PM_{2.5}, NO_x, SO₂, and CO to demonstrate compliance with the emission limits contained in this

permit. All stack tests for PM₁₀ and PM_{2.5} shall include both filterable and condensable portions. Separate tests shall be conducted for coal and petroleum coke for each kiln if both fuels have been used in the kiln since the previous stack test; otherwise, tests shall be conducted only on the fuel actually used since the previous stack test. Each annual stack test shall be conducted no later than 13 months after the previous stack test. Tests shall be conducted and reported and data reduced as set forth in 9VAC5-50-30. For PM, the test methods and procedures must comply with 40 CFR Part 63, Subpart AAAAA. The performance tests shall include a test method performance audit, where applicable. The details of the tests are to be arranged with DEQ. The permittee shall submit a test protocol at least 30 days prior to testing. Test results shall be submitted to DEQ within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9VAC5-80-110 and Condition 33 of the 1/29/19 PSD Permit)

44. **Fuel Burning Equipment Requirements – Lime Kilns (VP-LK-1 and VP-LK-2) - Testing** – If three consecutive annual stack tests conducted in accordance with Conditions 42 and/or 43 demonstrate compliance with the emission limits set forth in Conditions 15, 16, and 19, for any pollutant on either kiln when firing any fuel, then the stack testing frequency required by Condition 43 shall be reduced to every five years, as determined on a fuel-specific, pollutant-by-pollutant basis for each kiln. Then the permittee shall conduct another stack test for each lime kiln for each pollutant while firing the specific fuel within 60 months of the date of the third consecutive stack test that shows compliance with the emission limits for that pollutant when firing that fuel or, if a fuel has not been used since the previous stack test, within 60 days of resuming use of that fuel. Thereafter, the permittee must perform stack tests every fifth year but no later than 60 months following the previous stack test. If a stack test shows noncompliance with the emission limits for any pollutant, the permittee shall resume annual stack testing for each affected pollutant for each lime kiln when firing that fuel, until stack tests over three consecutive years show compliance with the applicable emission limits. (9VAC5-80-110 and Condition 34 of the 1/29/19 PSD Permit)
45. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Testing** – Visible Emission Evaluations (VEE) in accordance with the 40 CFR 60, Appendix A, Method 9, shall be conducted on the baghouse exhaust stack for each lime kiln, when firing coal and when firing petroleum coke, to determine compliance with the emission limit contained in Condition 22. The four initial VEE tests shall be conducted concurrently with the corresponding stack tests required in Condition 42. Each test shall consist of 30 sets of 24 consecutive observations (at 15-second intervals) to yield 30 six-minute averages. The details of the tests are to be arranged with DEQ. The permittee shall submit a test protocol at least 60 days prior to testing. One copy of the test result shall be submitted to DEQ within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9VAC5-80-110 and Condition 32 of the 1/29/19 PSD Permit)
46. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Testing** – Upon request by DEQ, the permittee shall conduct additional visible emission

evaluations from each lime kiln to demonstrate compliance with the visible emission limits contained in the permit. The details of the tests shall be arranged with DEQ.
(9VAC5-80-110 and Condition 35 of the 1/29/19 PSD Permit)

47. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 & LP-VK-2) – Testing** – Initial performance tests shall be conducted for VOC and Sulfuric Acid Mist (SAM) on each kiln to demonstrate compliance with the emission limits contained in Condition 21. Separate tests shall be conducted on each kiln firing coal or petroleum coke, with a total of four initial compliance tests required. The tests shall be performed within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. The tests required by this Condition shall be conducted concurrently with the initial performance tests required by Condition 42. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The performance tests shall include a test method performance audit, where applicable. The details of the tests are to be arranged with DEQ. The permittee shall submit a test protocol at least 60 days prior to testing. One copy of the test results shall be submitted to DEQ within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9VAC5-80-110 and Condition 103 of the 1/29/19 Minor NSR Permit)
48. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) – Testing** - Within five years after the initial performance tests completed pursuant to Condition 47, additional performance tests shall be conducted on each lime kiln for VOC and SAM to demonstrate compliance with the emission limits contained in this permit. Separate tests shall be conducted for coal and petroleum coke for each kiln. Tests shall be conducted and reported and data reduced as set forth in 9VAC5-50-30. The performance tests shall include a test method performance audit, where applicable. The details of the tests are to be arranged with DEQ. The permittee shall submit a test protocol at least 30 days prior to testing. Test results shall be submitted to DEQ within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9VAC5-80-110 and Condition 104 of the 1/29/19 Minor NSR Permit)
49. **Fuel Burning Equipment Requirements – Solid Fuel Dryer (HU-13030) - Testing** – Initial Visible Emission Evaluations (VEE) in accordance with the 40 CFR 60, Appendix A, Method 9, shall be conducted on the equipment identified in Condition 23 to determine compliance with the opacity limits established in the condition.

Each test shall consist of ten sets of 24 consecutive observations (at 15-second intervals) to yield ten six-minute averages. The details of the tests are to be arranged with DEQ. The evaluation shall be performed and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. One copy of the test result shall be submitted to DEQ within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9VAC5-80-110 and Condition 66 of the 1/29/19 PSD Permit)

50. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1, LP-VK-2 & HU-13030) -Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9VAC5-50-30 and 9VAC5-80-110)
51. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1, LP-VK-2 & H-13030) -Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9VAC5-80-110)
52. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 & LP-VK-2) - Reporting** - The permittee shall submit fuel quality reports to the Valley Regional Office within 30 days after the end of each calendar quarter. If no shipments of coal or petroleum coke were received during the calendar quarter, the quarterly report shall consist of the dates included in the calendar quarter and a statement that no coal or petroleum coke was received during the calendar quarter. If coal or petroleum coke was received during the calendar quarter, the reports shall include:
- a. The dates included in the calendar quarter;
 - b. A copy of all fuel supplier certifications for all shipments of coal or petroleum coke received during the calendar quarter or a quarterly summary from each fuel supplier that includes the information specified in Condition 13 for each shipment of coal or petroleum coke; and
 - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the coal and petroleum coke burned or received at the facility.
- (9VAC5-50-50 and 9VAC5-80-110)
53. **Fuel Burning Equipment Requirements – Lime Kilns (LP-VK-1 and LP-VK-2) - Reporting** - The permittee shall furnish written notification to DEQ of the anticipated date of the initial performance test and visible emissions evaluation on each vertical lime kiln, as required by Conditions 40.42. and 45, at least 60 days prior to such date.

Copies of the written notification referenced in subsections a, b, and c above are to be sent to:

Chief, Air Section
Enforcement & Compliance Assurance Division
Air, RCRA and Toxics Branch
U.S. EPA Region 3
1650 Arch St. – 3ED21
Philadelphia, PA 19103
R3_APD_Permits@epa.gov

(9VAC5-80-110 and Condition 94 of the 1/29/19 PSD Permit)

54. **Fuel Burning Equipment Requirements - Lime Kilns (LP-VK-1 and LP-VK-2) - General** - Except where this permit is more restrictive than the applicable requirement, the lime kilns shall be operated in compliance with the requirements of 40 CFR 63, Subpart AAAAAA.

(9VAC5-50-80 and Condition 29 of the 1/29/19 PSD Permit)

55. **Fuel Burning Equipment Requirements - Solid Fuel Dryer (HU-13030) - Limitations** - The solid fuel dryer shall consume no more than 29,652 million cubic feet (mcf) of natural gas per year, calculated as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110 and Condition 58 of the 1/29/19 PSD Permit)

Aggregate and Precalcination Limestone Process Equipment Requirements

56. **Aggregate & Precalcination Limestone Process Requirements - Emission Controls: Particulate Matter** – Particulate emissions from the following equipment shall be controlled by fabric filter baghouse:

Equipment Reference No.	Control Device Reference No.
BC-07004 (belt conveyor)	DC-07006
BC-07005 (belt conveyor)	
BN-07009 (120 ton limestone storage bin)	
BN-07010 (120 ton limestone storage bin)	
SN-07035 (screen)	
SP-07040 (reject stone loadout spout)	

Each fabric filter shall be provided with adequate access for inspection and shall be in operation when any of the associated equipment is operating.
(9VAC5-80-110 and Condition 36 of the 1/29/19 PSD Permit)

57. **Aggregate & Precalcination Limestone Process Requirements - Emission Controls: Particulate Matter** – Particulate emissions from the following equipment shall be controlled by a building enclosure and by wet suppression when necessary: the sizer (CR-51025), one screen (SN-51027) and one belt conveyor (BC-51001).
(9VAC5-80-110 and Condition 37 of the 1/29/19 PSD Permit)
58. **Aggregate & Precalcination Limestone Process Requirements - Emission Controls: Particulate Matter** – Particulate emissions from the following equipment shall be controlled by wet suppression when necessary based on weather conditions: five belt conveyors (BC-51005, -51006, -51007, -50003, and -07003), two skip hoists (BN-07044 and -07045), and four limestone piles (PILE3, PILE4, PILE5 and PILE8).
(9VAC5-80-110 and Condition 38 of the 1/29/19 PSD Permit)
59. **Aggregate & Precalcination Limestone Process Requirements - Emission Controls: Particulate Matter** – Particulate emissions from the following equipment shall be controlled by constructing the equipment underground: one belt conveyor (BC-07002).
(9VAC5-80-110 and Condition 39 of the 1/29/19 PSD Permit)

60. **Aggregate & Precalcination Limestone Process Requirements - Limitations** - The annual throughput of limestone for the Aggregate and Precalcination Limestone Handling Equipment, as described in the Emissions Unit Table in the permit, shall not exceed 2,000,000 tons per year, calculated monthly as the sum of each consecutive 12 month period. This limestone throughput shall be weighed at belt conveyor BC-51001. (9VAC5-80-110 and Condition 41 of the 1/29/19 PSD Permit)
61. **Aggregate & Precalcination Limestone Process Requirements - Limitations** – Emissions from the operation of the Aggregate and Precalcination Limestone (Main Plant) equipment, as described in the Emissions Unit Table in the permit, that are not controlled by fabric filter DC-07006 as described in Condition 56, shall not exceed the following limits:

Pollutant	Hourly Emissions (lb/hr)	Annual Emissions (tons)
Particulate Matter (PM) (filterable only)	2.66	4.50
PM ₁₀ (filterable only)	0.99	1.75
PM _{2.5} (filterable only)	0.33	0.69

These emissions are derived from the estimated overall emission contribution from operating limits. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 57, 58, 59, and 60. (9VAC5-80-110 and Condition 42 of the 1/29/19 PSD Permit)

62. **Aggregate & Precalcination Limestone Process Requirements - Limitations** – Particulate emissions from the fabric filter identified in Condition 56, shall not exceed 0.010 gr/dscf (filterable) for PM/PM₁₀, and 0.004 gr/dscf (filterable) for PM_{2.5}. (9VAC5-80-110, 40 CFR 60.672(a), Table 2 of 40 CFR 60 Subpart OOO, 40 CFR 63.7090(a), Table 1 of 40 CFR 63 Subpart AAAAA and Condition 43 of the 1/29/19 PSD Permit)
63. **Aggregate & Precalcination Limestone Process Requirements - Limitations** – Emissions from the dust collector identified below shall not exceed the following annual limits:

Control Device Reference No.	PM (tpy)*	PM₁₀ (tpy)*	PM_{2.5} (tpy)*
DC-07006	5.6	5.6	2.3

* Filterable only

These emissions are derived from the estimated overall emission contribution from operating limits. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 60, 62 and 76.
 (9VAC5-80-110 and Condition 44 of the 1/29/19 PSD Permit)

64. **Aggregate & Precalcination Limestone Process Requirements - Limitations** – Visible emissions from all Aggregate and Precalcination Limestone Handling Equipment controlled by a fabric filter baghouse (the equipment identified in Condition 56) shall not exceed seven percent opacity as determined by 40 CFR 60, Appendix A, Method 9.
 (9VAC5-50-80, 9VAC5-80-110, 40 CFR 63.7090(a), 40 CFR 63 Subpart AAAAA, Table 1, 40 CFR 60, Subpart OOO, Table 2 and Condition 45 of the 1/29/19 PSD Permit)
65. **Aggregate & Precalcination Limestone Process Requirements - Limitations** – Visible emissions from the sizer (CR-51025) shall not exceed twelve percent opacity as determined by 40 CFR 60, Appendix A, Method 9.
 (9VAC5-80-110, 40 CFR 60, Subpart OOO, Table 3 and Condition 46 of the 1/29/19 PSD Permit)
66. **Aggregate & Precalcination Limestone Process Requirements - Limitations** – Visible emissions from screening, stockpiles, hoppers, conveyor and feeder transfers, and fugitive emission sources shall not exceed seven percent opacity as determined by 40 CFR 60, Appendix A, Method 9.
 (9 VAC5-80-110, Table 2 of 40 CFR 60 Subpart OOO, 40 CFR 63.7090(a), Table 1 of 40 CFR 63 Subpart AAAAA and Condition 47 of the 1/29/19 PSD Permit)
67. **Aggregate & Precalcination Limestone Process Requirements – Limitations** – Any building enclosing Processed Stone Handling (PSH) operations shall have no visible emissions, except from a vent, and vent emissions shall not exceed the stack emissions limitations in Conditions 62 and 64.
 (9VAC5-80-110, 40 CFR 63.7090(a) and Table 1 of 40 CFR 63 Subpart AAAAA)
68. **Aggregate & Precalcination Limestone Process Requirements – Limitations** - Except where this permit is more restrictive than the applicable requirement, the equipment identified in the Equipment List in the Introduction of this permit as being subject to 40 CFR 60, Subpart OOO shall be operated in compliance with the requirements of 40 CFR 60, Subpart OOO.
 (9VAC5-80-110 and Condition 40 of the 1/29/19 PSD Permit)

69. **Aggregate & Precalcination Limestone Process Requirements – Monitoring** – To ensure good performance, the facility shall perform weekly inspections on all wet suppression systems that are used to control fugitive dust at the facility, to ensure that water is flowing to each discharge spray nozzle in each wet suppression system that has operated during that week. The facility shall initiate initial corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The permittee shall record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in a logbook (in written or electronic format). The permittee shall keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to DEQ upon request.
(9VAC5-80-110, 40 CFR 60.674(b), 40 CFR 60.676(b) and Condition 91 of the 1/29/19 PSD Permit)
70. **Aggregate & Precalcination Limestone Process Requirements - Monitoring** – The fabric filter identified in Condition 56 shall be equipped with a device to continuously measure the differential pressure across the fabric filter. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filter is operating.
(9VAC5-80-110 and Condition 86 of the 1/29/19 PSD Permit)
71. **Aggregate & Precalcination Limestone Process Requirements - Monitoring** – Differential pressure measurement devices across the fabric filter listed in Condition 56 shall be equipped with audible alarms to detect operation outside of the high and low differential pressure levels suggested by the fabric filter manufacturer. The alarm shall be set to sound each time the differential pressure falls outside the recommended range. Corrective action shall be taken each time the alarm is activated, such that the fabric filter is returned to its recommended differential pressure range. The alarm system shall be configured and tested in accordance with approved procedures which shall include, as a minimum, common industry practices. The alarm system shall be in operation when the fabric filter is operating.
(9VAC5-80-110 and Condition 87 of the 1/29/19 PSD Permit)
72. **Aggregate & Precalcination Limestone Process Requirements - Monitoring** – To ensure good performance, the device(s) used to continuously measure the differential pressure across the fabric filter identified in Condition 56 shall be observed by the permittee not less than once per week of operation. The permittee shall continuously record measurements from the control equipment monitoring device. If during the inspection, the differential pressure is not within the manufacturer's recommended range, timely corrective action shall be taken such that the fabric filter resumes proper operation.
(9VAC5-80-110 and Condition 88 of the 1/29/19 PSD Permit)

73. **Aggregate & Precalcination Limestone Process Requirements – Monitoring** - The permittee shall conduct a visible emissions inspection of each piece of equipment identified in the Equipment List in the Introduction to this permit that is not controlled by a fabric filter/baghouse in accordance with the following procedures and frequencies:
- a. At a minimum of once per operating week, the permittee shall observe the presence of visible emissions. Each observation period shall be a minimum of one minute. If during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9, unless timely corrective action is initiated within two hours of the visible emissions inspection such that the equipment operates with no visible emissions within 24 hours of the initial observation. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed the applicable opacity standard for the emissions unit, the VEE shall be conducted for a total of 60 minutes or until an exceedance of the opacity standard for that emission unit has been documented, whichever period is shorter. If visible emissions exceed the limit for that emission unit, then timely corrective action shall be taken such that the equipment resumes operation with visible emissions not exceeding the limit for that equipment.
 - b. All visible emissions inspections shall be performed when the equipment is operating under representative conditions for the day.
 - c. If visible emissions inspections conducted during four consecutive weeks show no visible emissions, the permittee may reduce the monitoring frequency to monthly for that emission unit. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per operating week for that emission unit.

(9VAC5-80-110 and Condition 90 of the 1/29/19 PSD Permit)

74. **Aggregate & Precalcination Limestone Process Equipment Requirements - Recordkeeping** - The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with DEQ. These records shall include, but are not limited to:
- a. The monthly and annual throughput of limestone as specified in Condition 60. The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
 - b. Results of all performance tests and visible emissions evaluations.
 - c. Daily wet suppression spray systems inspection results including:
 - i. The date, time, and name of person performing each inspection;

- ii. A list of items inspected;
 - iii. The pressure gauge reading; and
 - iv. Any maintenance or repairs performed as a result of these inspections.
- d. Periodic visible emissions inspection results as required by Condition 73, including:
- i. The date, time, and name of person performing each inspection;
 - ii. Whether or not there were visible emissions;
 - iii. Any maintenance or repairs performed as a result of these inspections including the date, time and person performing the repairs; and
 - iv. VEE results.
- e. A copy of each notification and report that was submitted to comply with the 40 CFR Part 63, Subpart AAAAA, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements in 40 CFR 63.10(b)(2).
- f. Records of performance tests, performance evaluations, and opacity and VE observations as required in 40 CFR 63.10(b)(2)(viii).
- g. Records in 40 CFR 63.6(h)(6) for VE observations.
- h. Records required by Tables 5 and 6 of 40 CFR Part 63, Subpart AAAAA to show continuous compliance with each emission limitation that applies to the facility.
- i. Records which document the basis for the initial applicability determination as required under 40 CFR 63.7081.
- j. All other records required by 40 CFR 60 Subpart OOO and 40 CFR 63 Subpart AAAAA that are not described individually in this Condition.

These records shall be available for inspection by DEQ and shall be current for the most recent five years.

(9VAC5-80-110, 40 CFR 60 Subpart OOO, 40 CFR 63 Subpart AAAAA and Condition 93 of the 1/29/19 PSD Permit)

75. **Aggregate & Precalcination Limestone Process Requirements – Testing – Visible Emission Evaluations (VEE)** in accordance with the 40 CFR 60, Appendix A, Method 9,

and the procedures in 40 CFR 60.11 and 60.675 shall be conducted on the sizer (CR-51025) to determine compliance with the opacity limits established in Condition 64.

Each test shall consist of thirty sets of 24 consecutive observations (at 15-second intervals) to yield thirty six-minute averages. The details of the tests are to be arranged with DEQ. The permittee shall submit a test protocol at least fourteen days prior to testing. The evaluation shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. The performance tests shall include a test method performance audit where applicable. One copy of the test results shall be submitted to DEQ within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility and shall conform to the test report format enclosed with this permit. (9VAC5-80-110, 40 CFR 60.672, 40 CFR 60.675(d), Table 3 of 40 CFR 60 Subpart OOO, and Condition 51 of the 1/29/19 PSD Permit)

76. **Aggregate & Precalcination Limestone Process Requirements - Testing** – Upon request by DEQ, the permittee shall conduct an additional performance test on the fabric filter baghouse referenced in Condition 56 to determine compliance with any of the emission limits specified in Condition 62. The details of the test shall be arranged with DEQ. (9VAC5-80-110 and Condition 52 of the 1/29/19 PSD Permit)
77. **Aggregate & Precalcination Limestone Process Requirements – Testing** - Upon request by DEQ, the permittee shall conduct additional visible emission evaluations from any of the emissions units identified in Conditions 64, 65, and 66 to demonstrate compliance with the visible emission limits contained in those Conditions. The details of the tests shall be arranged with DEQ. (9VAC5-80-110 and Condition 53 of the 1/29/19 PSD Permit)
78. **Aggregate & Precalcination Limestone Process Requirements – Testing** – The permittee shall conduct a visible emissions (VE) check of each piece of equipment subject to 40 CFR 63, Subpart AAAAA (BC-07002, BC-07003, BC-07004, BC-07005, BC-07009, BC-07010, SN-07035, BN-07044, BN-07045). The check must be conducted while the affected source is in operation;
 - a. If no VE are observed in six consecutive monthly checks for any emission unit, the permittee may decrease the frequency of VE from monthly to semi-annually for that emission unit. If VE are observed during any semi-annual check, the permittee must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly checks;
 - b. If no VE are observed during the semi-annual check for any emission unit, the permittee may decrease the frequency of VE checking from semi-annually to annually for that emission unit. If VE are observed during any annual check, the permittee must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly checks; and

- c. If VE are observed during any VE check, the permittee must conduct a six-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The permittee must begin the Method 9 test within one-hour of any observation of VE and the six-minute opacity reading must not exceed the applicable opacity limit.

(9VAC5-80-110, 40 CFR 60.674(c) and (e), 40 CFR 63.7121(e) and Condition 54 of the 1/29/19 PSD Permit)

- 79. **Aggregate & Precalcination Limestone Requirements – Testing** – For fugitive emissions from any PSH operation subject to an opacity limit, the permittee shall conduct initial opacity observations according to 40 CFR 60, Appendix A, Method 9, within 180 days after startup of the roller crusher (CR-51025). The test duration must be for at least three hours, but the three-hour test may be reduced to one hour if, during the first one-hour period, there are no individual readings greater than 10 percent opacity and there are no more than three readings of 10 percent opacity.
(9VAC5-80-110, 40 CFR 63.7112 and Table 4 of 40 CFR 63 Subpart AAAAA)
- 80. **Aggregate & Precalcination Limestone Requirements – Testing** – For each building enclosing a PSH operations that is subject to a VE limit, the permittee shall conduct an initial VE check according to the specifications in 40 CFR 63.7112(k), within 180 days after startup of the roller crusher (CR-51025). The performance test must be conducted while all affected PSH operations within the building are operating; the performance test for each affected building must be at least 75 minutes, with each side of the building and roof being observed for at least 15 minutes.
(9VAC5-80-110, 40 CFR 63.7112(k) and Table 4 of 40 CFR 63 Subpart AAAAA)
- 81. **Aggregate & Precalcination Limestone Requirements – Reporting** - The permittee shall furnish written notification to DEQ of:
 - a. The actual date on which construction of the Sizer (CR-51025) commenced, within 30 days after such date.
 - b. The actual start-up date of the Sizer (CR-51025), within 15 days after such date.
 - c. The actual date on which installation of each piece of equipment subject to Subpart OOO (as identified in the Equipment List in the Introduction to this permit) commences within 30 days after such date.
 - d. The actual start-up date of each piece of equipment subject to Subpart OOO (as identified in the Equipment List in the Introduction to this permit) within 15 days after such date.

- e. The anticipated date of the initial performance tests and/or initial visible emission evaluation (as required by Condition 75), postmarked at least seven days prior to such date.

(9VAC5-80-110, Condition 94 of the 1/29/19 PSD Permit and Condition 106 of the 1/29/19 Minor NSR Permit)

Solid Fuel Handling Equipment Requirements

82. **Solid Fuel Handling Equipment Requirements – Limitations** – Particulate emissions from the following equipment shall be controlled by fabric filter baghouses:

Equipment Reference No.	Control Device Reference No.
CFR-13012 (dynamic classifier)	DC-13017
CR-13013 (solid fuel milling)	
SC-903 (screw conveyor)	
BN-13045 (50 ton solid fuel bin)	
BC-13003 (belt conveyor)	DC-13005
BC-13004 (85 ton solid fuel bin)	

Each fabric filter shall be provided with adequate access for inspection and shall be in operation when the associated equipment is operating.
(9VAC5-80-110 and Condition 55 of the 1/29/19 PSD Permit)

83. **Solid Fuel Handling Equipment Requirements – Limitations** – The throughput of coal and petroleum coke combined shall not exceed 168 tons per day. The throughput of coal and petroleum coke combined shall not exceed 52,560 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. This throughput shall be measured at the weigh belt feeder BF-2109, which precedes the dynamic classifier (Ref. No. CFR-13012).
(9VAC5-80-110 and Condition 59 of the 1/29/19 PSD Permit)

84. **Solid Fuel Handling Equipment Requirements - Limitations** – Particulate emissions from each of the fabric filter baghouses listed in Condition 82, shall not exceed 0.010 gr/dscf (filterable) for PM/PM₁₀, and 0.004 gr/dscf (filterable) for PM_{2.5}. (9VAC5-80-110 and Condition 60 of the 1/29/19 PSD Permit)

85. **Solid Fuel Handling Equipment Requirements - Limitations** – Emissions from each dust collector identified below shall not exceed the following annual limits:

Control Device Reference No.	PM (tpy)*	PM₁₀ (tpy)*	PM_{2.5} (tpy)*
DC-13017	3.10	3.10	1.24
DC-907	1.59	1.59	0.63
DC-13005	1.50	1.50	0.60

* Filterable only

These emissions are derived from the estimated overall emission contribution from operating limits. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 83, 84, and 91. (9VAC5-80-110 and Condition 61 of the 1/29/19 PSD Permit)

86. **Solid Fuel Handling Equipment Requirements - Limitations** - Visible emissions from each fabric filter stack and solid fuel handling equipment operations shall not exceed seven percent opacity as determined by the 40 CFR 60, Appendix A, Method 9. (9VAC5-50-80, 9VAC5-80-110 and Condition 63 of the 1/29/19 PSD Permit)

87. **Solid Fuel Handling Equipment Requirements - Monitoring** – Each of the fabric filters identified in Condition 82 shall be equipped with a device to continuously measure the differential pressure across the fabric filters. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when each fabric filter is operating. (9VAC5-80-110 and Condition 86 of the 1/29/19 PSD Permit)

88. **Solid Fuel Handling Equipment Requirements - Monitoring** – Differential pressure measurement devices across each fabric filter listed in Condition 82 shall be equipped with audible alarms to detect operation outside of the high and low differential pressure levels suggested by the fabric filter manufacturer. The alarm shall be set to sound each time the differential pressure falls outside the recommended range. Corrective action shall be taken each time the alarm is activated, such that the fabric filter is returned to its recommended

differential pressure range. The alarm system shall be configured and tested in accordance with approved procedures which shall include, as a minimum, common industry practices. The alarm system shall be in operation when any fabric filter is operating.
(9VAC5-80-110 and Condition 87 of the 1/29/19 PSD Permit)

89. **Solid Fuel Handling Equipment Requirements - Monitoring** – To ensure good performance, the device(s) used to continuously measure the differential pressure across each fabric filter identified in Condition 82 shall be observed by the permittee not less than once per week of operation. The permittee shall continuously record measurements from the control equipment monitoring devices. If during the inspection, the differential pressure is not within the manufacturer's recommended range, timely corrective action shall be taken such that the fabric filter resumes proper operation.
(9VAC5-80-110 and Condition 88 of the 1/29/19 PSD Permit)
90. **Solid Fuel Handling Equipment Requirements - Recordkeeping** - The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with DEQ. These records shall include, but are not limited to:
- a. Coal shipments purchased, indicating sulfur and ash content per shipment. A copy of the coal purchase agreement which specifies the sulfur content and maximum ash limits shall be maintained with these records.
 - b. Petroleum coke shipments purchased, indicating sulfur and ash content per shipment. A copy of the petroleum coke purchase agreement which specifies the sulfur content and maximum ash limits shall be maintained with these records.
 - c. All fuel supplier certifications for natural gas, coal, and petroleum coke.
 - d. Results of all performance tests and visible emissions evaluations.

These records shall be available for inspection by DEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Condition 93 of the 1/29/19 PSD Permit)

91. **Solid Fuel Handling Equipment Requirements - Testing** – Upon request by DEQ, the permittee shall conduct performance tests on any of the fabric filter baghouses referenced in Condition 82 to determine compliance with any of the emission limits specified in Condition 84. The details of the tests shall be arranged with DEQ.
(9VAC5-80-110 and Condition 67 of the 1/29/19 PSD Permit)

92. **Solid Fuel Handling Equipment Requirements - Testing** – Upon request by DEQ, the permittee shall conduct visible emission evaluations from any emissions units identified in Condition 86 to demonstrate compliance with the visible emission limits contained in the condition. The details of the tests shall be arranged with DEQ.
(9VAC5-80-110 and Condition 68 of the 1/29/19 PSD Permit)
93. **Solid Fuel Handling Equipment Requirements – Reporting** - The permittee shall furnish written notification to DEQ of:
- a. The actual date on which installation of each piece of equipment subject to Subpart OOO (as identified in the Equipment List in the Introduction to this permit) commences within 30 days after such date.
 - b. The actual start-up date of each piece of equipment subject to Subpart OOO (as identified in the Equipment List in the Introduction to this permit) within 15 days after such date.

(9VAC5-80-110, Condition 94 of the 1/29/19 PSD Permit and Condition 106 of the 1/29/19 Minor NSR Permit)

Lime Finishing and Loadout Equipment Requirements

94. **Lime Finishing & Loadout Equipment Requirements – Limitations** - Particulate matter emissions from the following equipment shall be controlled by fabric filter:

Equipment	Dust Collector / Fabric Filter Reference
BC-24021, BC-24019, BC-24029, SN-24017, SN-24016, BC-24015, BN-20001 through BN-20004, BN-20006, BN-20008, BN-20010 through BN-20012	DC-24044
BC-20082, BE-24050, BC-20054	DC-24047
BC-06040	DC-06037
BN-06050, BN-06051, CR-06031, SN-06033, BC-06008	DC-06014

Equipment	Dust Collector / Fabric Filter Reference
BC-06007, BN-06030, SP-06035, PC-15003, PC-15004	DC-06015
BC-06006, BC-06007	DC-06016
BC-20053, SP-20068	DC-20084
BN-24001 through BN-24004	DC-06017
BC-24013, CR-20074, BE-20075	DC-24035
BC-06011	DC-06047
BC-24014	DC-24038

Each baghouse shall be provided with adequate access for inspection and shall be in operation when the associated equipment is operating.

(9VAC5-80-110 and Condition 69 of the 1/29/19 PSD Permit)

95. **Lime Finishing & Loadout Equipment Requirements - Limitations** - The yearly throughput of lime to the Lime Finishing and Loadout Process shall not exceed 471,000 tons, calculated monthly as the sum of each consecutive 12-month period.

(9VAC5-80-110 and Condition 70 of the 1/29/19 PSD Permit)

96. **Lime Finishing & Loadout Equipment Requirements - Limitations** – Particulate emissions from each of the fabric filter baghouses listed in Condition 94, shall not exceed 0.010 gr/dscf (filterable) for PM/PM₁₀, and 0.004 gr/dscf (filterable) for PM_{2.5}.

(9VAC5-80-110 and Condition 71 of the 1/29/19 PSD Permit)

97. **Lime Finishing & Loadout Equipment Requirements – Limitations** – Emissions from each dust collector identified below shall not exceed the following annual limits:

Control Device Reference No.	PM (tpy)*	PM ₁₀ (tpy)	PM _{2.5} (tpy)
DC-24044	3.75	3.75	1.50
DC-24047	3.75	3.75	1.50

Control Device Reference No.	PM (tpy)*	PM₁₀ (tpy)	PM_{2.5} (tpy)
DC-06037	3.00	3.00	1.20
DC-06014	3.00	3.00	1.20
DC-06015	1.88	1.88	0.75
DC-06016	1.88	1.88	0.75
DC-20002	0.75	0.75	0.30
DC-06017	0.89	0.89	0.36
DC-24035	1.88	1.88	0.75
DC-06047	0.75	0.75	0.30
DC-24038	1.50	1.50	0.60
DC-20084	0.56	0.56	0.23
DC-20076	2.44	2.44	0.98

* Filterable only

These emissions are derived from the estimated overall emission contribution from operating limits. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 95, 96 and 114.
 (9VAC5-80-110 and Condition 72 of the 1/29/19 Permit)

98. **Lime Finishing & Loadout Equipment Requirements - Limitations** - Visible emissions from each of the baghouses listed in Condition 94 shall not exceed seven percent opacity as determined by using 40 CFR 60, Appendix A, Method 9.
 (9VAC5-80-110 and Condition 73 of the 1/29/19 Permit)
99. **Lime Finishing & Loadout Equipment Requirements - Limitations** - Visible emissions from any fugitive emission point associated with the Lime Finishing and Loadout Process shall not exceed 10 percent opacity as determined by using 40 CFR 60, Appendix A, Method 9.
 (9VAC5-80-110 and Condition 74 of the 1/29/19 PSD Permit)
100. **Lime Finishing & Loadout Equipment Requirements - Monitoring** – Each of the fabric filters identified in Condition 94 shall be equipped with a device to continuously measure the differential pressure across the fabric filters. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when each fabric filter is operating.
 (9VAC5-80-110 and Condition 86 of the 1/29/19 PSD Permit)

101. **Lime Finishing & Loadout Equipment Requirements - Monitoring** – Differential pressure measurement devices across each fabric filter listed in Condition 94 shall be equipped with audible alarms to detect operation outside of the high and low differential pressure levels suggested by the fabric filter manufacturer. The alarm shall be set to sound each time the differential pressure falls outside the recommended range. Corrective action shall be taken each time the alarm is activated, such that the fabric filter is returned to its recommended differential pressure range. The alarm system shall be configured and tested in accordance with approved procedures which shall include, as a minimum, common industry practices. The alarm system shall be in operation when any fabric filter is operating.
(9VAC5-80-110 and Condition 87 of the 1/29/19 PSD Permit)
102. **Lime Finishing & Loadout Equipment Requirements - Monitoring** – To ensure good performance, the device(s) used to continuously measure the differential pressure across each fabric filter identified in Condition 94 shall be observed by the permittee not less than once per week of operation. The permittee shall continuously record measurements from the control equipment monitoring devices. If during the inspection, the differential pressure is not within the manufacturer's recommended range, timely corrective action shall be taken such that the fabric filter resumes proper operation.
(9VAC5-80-110 and Condition 88 of the 1/29/19 PSD Permit)
103. **Lime Finishing & Loadout Equipment Requirements – Monitoring** - The permittee shall conduct a visible emissions inspection of each piece of equipment identified in the Equipment List in the Introduction to this permit that is not controlled by a fabric filter/baghouse in accordance with the following procedures and frequencies:
- a. At a minimum of once per operating week, the permittee shall observe the presence of visible emissions. Each observation period shall be a minimum of one minute. If during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9, unless timely corrective action is initiated within two hours of the visible emissions inspection such that the equipment operates with no visible emissions within 24 hours of the initial observation. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed the applicable opacity standard for the emissions unit, the VEE shall be conducted for a total of 60 minutes or until an exceedance of the opacity standard for that emission unit has been documented, whichever period is shorter. If visible emissions exceed the limit for that emission unit, then timely corrective action shall be taken such that the equipment resumes operation with visible emissions not exceeding the limit for that equipment.
 - b. All visible emissions inspections shall be performed when the equipment is operating under representative conditions for the day.
 - c. If visible emissions inspections conducted during four consecutive weeks show no visible emissions, the permittee may reduce the monitoring frequency to monthly for

that emission unit. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per operating week for that emission unit.

(9VAC5-80-110 and Condition 90 of the 1/29/19 PSD Permit)

104. **Lime Finishing & Loadout Equipment Requirements – DC-06016, DC-24038, & DC-24047 - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the designated fabric filters controlling Lime Finishing & Loadout equipment according to the attached CAM Plan.
(9VAC5-80-110 and 40 CFR 64.6(c))
105. **Lime Finishing & Loadout Equipment Requirements - DC-06016, DC-24038, & DC-24047 - Monitoring - CAM** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9VAC5-80-110 and 40 CFR 64.6(c))
106. **Lime Finishing & Loadout Equipment Requirements - DC-06016, DC-24038, & DC-24047 - Monitoring - CAM** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9VAC5-80-110 and 40 CFR 64.7(b))
107. **Lime Finishing & Loadout Equipment Requirements - DC-06016, DC-24038, & DC-24047 - Monitoring - CAM** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the Lime Finishing & Loadout equipment routed to the fabric filter is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9VAC5-80-110 and 40 CFR 64.7(c))
108. **Lime Finishing & Loadout Equipment Requirements - DC-06016, DC-24038, & DC-24047 - Monitoring - CAM** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the Lime Finishing & Loadout equipment (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup,

shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable. (9VAC5-80-110 and 40 CFR 64.7(d)(1))

109. **Lime Finishing & Loadout Equipment Requirements - DC-06016, DC-24038, & DC-24047 - Monitoring - CAM** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9VAC5-80-110 and 40 CFR 64.7(d)(2))

110. **Lime Finishing & Loadout Equipment Requirements - DC-06016, DC-24038, & DC-24047 - Monitoring - CAM** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Valley Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9VAC5-80-110 and 40 CFR 64.7(e))

111. **Lime Finishing & Loadout Equipment Requirements - DC-06016, DC-24038, & DC-24047 - Monitoring - CAM** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the Lime Finishing & Loadout equipment routed to the designated fabric filter for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

- a. Improved preventative maintenance practices;
- b. Process operation changes;
- c. Appropriate improvements to control methods;

- d. Other steps appropriate to correct control performance; and
- e. More frequent or improved monitoring.

(9VAC5-80-110 and 40 CFR 64.8(a) and (b))

112. Lime Finishing & Loadout Equipment Requirements - Recordkeeping - The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with DEQ. These records shall include, but are not limited to:

- a. The annual throughput of lime, in tons, processed by the Lime Loadout Facility, calculated monthly as the sum of each consecutive 12-month period.
- b. Results of all performance tests and visible emissions evaluations.
- c. Periodic visible emissions inspection results as required by Condition 103, including:
 - i. The date, time, and name of person performing each inspection;
 - ii. Whether or not there were visible emissions;
 - iii. Any maintenance or repairs performed as a result of these inspections including the date, time and person performing the repairs; and
 - iv. VEE results.

These records shall be available for inspection by DEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Conditions 93 and 105 of the 1/29/19 PSD Permit)

113. Lime Finishing & Loadout Equipment Requirements - DC-06016, DC-24038, & DC-24047 - CAM Recordkeeping - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(9VAC5-80-110 and 40 CFR 64.9(b))

114. Lime Finishing & Loadout Equipment Requirements - Testing – Upon request by DEQ, the permittee shall conduct performance tests on any of the fabric filter baghouses referenced in Condition 94 to determine compliance with any of the emission limits specified in Condition 96. The details of the tests shall be arranged with DEQ.

(9VAC5-80-110 and Condition 77 of the 1/29/19 PSD Permit)

115. **Lime Finishing & Loadout Equipment Requirements – Testing** - Upon request by DEQ, the permittee shall conduct visible emission evaluations from any of the emissions units identified in Conditions 98 and 99 to demonstrate compliance with the visible emission limits contained in the permit. The details of the tests shall be arranged with DEQ. (9VAC5-80-110 and Condition 78 of the 1/29/19 PSD Permit)
116. **Lime Finishing & Loadout Equipment Requirements - DC-06016, DC-24038, & DC-24047 - CAM Reporting** - The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition 160 of this permit to the Valley Regional Office. Such reports shall include at a minimum:
- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9VAC5-80-110 F and 40 CFR 64.9(a))

Facility Wide Conditions

117. **Facility-wide Conditions - Emission Controls** - Fugitive emission controls shall include the following, or equivalent, as a minimum:
- a. Dust from drills, shot piles, material handling, screens, crushers, load-outs, and traffic areas shall be controlled by wet suppression or equivalent.
 - b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling at all times to minimize emissions.
 - c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by DEQ.
 - d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Trucks leaving the site shall have their wheels cleaned by use of a wheel washer or equivalent method. Dirt, product, or raw material spilled or

tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9VAC5-80-110 and Condition 80 of the 1/29/19 PSD Permit)

118. Facility-wide Conditions - Dust Control Plan – In order to minimize the duration and frequency of excess emissions, the permittee shall develop and implement a Dust Control Plan that outlines the preventative measures to be implemented for fugitive dust control at the facility. The plan include the following as a minimum:

- a. Identification of the personnel responsible for overseeing fugitive dust control;
- b. Description and the frequency of measures to be taken to prevent excess emissions from drills, shot piles, material handling, and load-outs;
- c. Description and the frequency of measures to be taken to prevent excess emissions from storage piles and stockpiling operations;
- d. Description and the frequency of measures to be taken to prevent fugitive dust from haul roads and other unpaved surfaces;
- e. Description and the frequency of measures to be taken to prevent fugitive dust from conveying or transporting materials;
- f. Description and the frequency of measures to be taken to prevent deposition of dirt on paved surfaces within the facility and access roads entering the facility.

(9VAC5-80-110 and Condition 81 of the 1/29/19 PSD Permit)

119. Facility Wide Conditions – Operating Standards - For each emission unit equipped with an add-on air pollution control device used to comply with 40 CFR 63 Subpart AAAAA, the permittee must inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in Item 6 of Table 2 to 40 CFR 63 Subpart AAAAA and record the results of each inspection.

(9VAC5-80-110, 40 CFR 63.7090(b), 40 CFR 63.7113(f), 40 CFR 63.7114(b) and Table 2 of 40 CFR 63 Subpart AAAAA)

120. Facility Wide Conditions – Operating Standards - The permittee must implement the DEQ approved written operations, maintenance, and monitoring (OM&M) plan for the lime manufacturing plant. Any subsequent changes to the plan must be submitted to DEQ for review and approval. Pending approval by DEQ of an initial or amended plan, the permittee must comply with the provisions of the submitted plan. Each plan must contain the following information:

- a. Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable, for each emission unit.
- b. A monitoring schedule for each emission unit that is subject to 40 CFR 63 Subpart AAAAA.
- c. Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating limits in Tables 1 and 2 of 40 CFR 63, Subpart AAAAA, respectively.
- d. Procedures for the proper installation, operation, and maintenance of monitoring devices or systems used to determine compliance, including:
 - i. Calibration and certification of accuracy of each monitoring device.
 - ii. Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems.
 - iii. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (3), and (4)(ii).
 - iv. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d).
- e. Procedures for monitoring process and control device parameters.
- f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in Table 2 of 40 CFR Part 63, Subpart AAAAA, including:
 - i. Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended.
 - ii. Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date the corrective action was completed.
- g. A maintenance schedule for each emission unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(9VAC5-80-110, 40 CFR 63.7090(b), 40 CFR 63.7100(d), Table 2 to 40 CFR 63 Subpart AAAAA and Condition 84 of the 1/29/19 PSD Permit)

121. Facility Wide Conditions – Operating Standards – For each emission unit equipped with an add-on air pollution control device, the permittee shall:

- a. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a baghouse; and
- b. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

(9VAC5-80-110, 40 CFR 63.7090(b) and Table 2 to 40 CFR 63 Subpart AAAAA)

122. **Facility Wide Conditions – General Compliance** – The permittee shall comply with the General Provisions in 40 CFR 63 Subpart A as indicated as applicable in Table 8 to 40 CFR 63 Subpart AAAAA.

(9VAC5-80-110, 40 CFR 63 Subpart A, 40 CFR 63.7140 and Table 8 to 40 CFR 63 Subpart AAAAA)

123. **Facility Wide Conditions – General Compliance** – The permittee shall comply with the emission limitations (including operating limits) in 40 CFR 63 Subpart AAAAA.

(9VAC5-80-110 and 40 CFR 63.7100(a))

124. **Facility Wide Conditions – General Compliance** – The permittee shall comply with the opacity and visible emission limits in 40 CFR 63 Subpart AAAAA during the times specified in 40 CFR 63.6(h)(1).

(9VAC5-80-110 and 40 CFR 63.7100(b))

125. **Facility Wide Conditions – General Compliance** - At all times, including periods of startup, shutdown, and malfunction, the permittee must operate and maintain the kilns and PSH operations, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to DEQ which may include, but is not limited to: monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in Condition 24), review of operation and maintenance records, and inspection of the source.

(9VAC5-80-110, 40 CFR 63.6(e)(1)(i), 40 CFR 63.7100 (c) and Condition 83 of the 1/29/19 PSD Permit)

126. Facility Wide Conditions – General Compliance - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9VAC5-80-110 and Condition 110 of the 1/29/19 NSR Permit)

127. Facility Wide Conditions – Monitoring - For emission units subject to 40 CFR 63, Subpart AAAAA (as identified in the Equipment List in the Introduction), the permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the Operation, Maintenance, and Monitoring (OM&M) plan required by 40 CFR 63.7100(d) and 63.7113 (a)(1) through (a) (5).
(9VAC5-80-110, 40 CFR 63.7113(a) and Condition 10 of the 1/29/19 PSD Permit)

128. Facility Wide Conditions – Monitoring - For each pressure measurement device used to comply with 40 CFR 63 Subpart AAAAA, the permittee shall meet the requirements in 40 CFR 63.7113(a)(1) through (5) and the following:

- a. Locate the pressure sensor(s) in or as close to as possible a position that provides a representative measurement of the pressure;
- b. Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion;
- c. Use a gauge with a minimum tolerance of 0.5 inch of water or a transducer with a minimum tolerance of 1 percent of the pressure range;
- d. Check pressure tap pluggage daily;

- e. Using a manometer, check gauge calibration quarterly and transducer calibration monthly;
- f. Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor; and
- g. At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(9VAC5-80-110 and 40 CFR 63.7113(c))

129. **Facility Wide Conditions – Monitoring** - For each COMS used to monitor an add-on air pollution control device, the permittee shall meet the following requirements:

- a. Install the COMS at the outlet of the control device; and
- b. Install, maintain, calibrate, and operate the COMS as required by 40 CFR 63 Subpart A, General Provisions and according to Performance Specification (PS)-1 of Appendix B to 40 CFR 60.

(9VAC5-80-110 and 40 CFR 63.7113(g))

130. **Facility Wide Conditions – Monitoring** – For the purpose of demonstrating compliance with 40 CFR 63 Subpart AAAAA, the permittee shall monitor and collect data according to the following:

- a. Except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments), and except for PSH operations subject to monthly VE testing, the permittee shall monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating;
- b. Data recorded during the conditions described below may not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system;
- c. Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;
- d. Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and

- e. Start-ups, shutdowns, and malfunctions.

(9VAC5-80-110 and 40 CFR 63.7120)

131. **Facility Wide Conditions – Monitoring** – The permittee shall demonstrate continuous compliance with the requirement to maintain and operate each baghouse such that the average opacity for any six-minute block period does not exceed 15 percent by:

- a. Installing, maintaining, calibrating and operating a COMS as required by 40 CFR 63 Subpart A, General Provisions and according to PS-1 of Appendix B to 40 CFR 60; and
- b. Collecting the COMS data at a frequency of at least once every 15 seconds, determining block averages for each six-minute period and demonstrating for each six-minute block period the average opacity does not exceed 15 percent.

(9VAC5-80-110, 40 CFR 63.7121(a) and Table 5 of 40 CFR 63 Subpart AAAAA)

132. **Facility Wide Conditions – Monitoring** – For each PSH operation subject to an opacity limit in Table 1 of 40 CFR 63 Subpart AAAAA or any vents from any buildings subject to an opacity limit in 40 CFR 63 Subpart AAAAA, the permittee shall demonstrate compliance by:

- a. Conducting a monthly one-minute VE check of each emission unit in accordance with 40 CFR 63.7121(e); the check must be conducted while the affected source is in operation;
- b. If no VE are observed in six consecutive monthly checks for any emission unit, the permittee may decrease the frequency of VE checking from monthly to semi-annually for that emission unit; if VE are observed during any semiannual check, the permittee shall resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly checks;
- c. If no VE are observed during the semiannual check for any emission unit, the permittee may decrease the frequency of VE checking from semi-annually to annually for that emission unit; if VE are observed during any annual check, the permittee shall resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly checks; and
- d. If VE are observed during any VE check, you must conduct a six-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9; the permittee shall begin the Method 9 test within one hour of any observation of VE and the six-minute opacity reading must not exceed the applicable opacity limit.

(9VAC5-80-110, 40 CFR 63.7121(a) and Table 6 to 40 CFR 63 Subpart AAAAA)

133. **Facility Wide Conditions – Monitoring** – For any building subject to a limit of no visible emissions according to Table 1 Item 8 of 40 CFR 63 Subpart AAAAAA, the permittee shall demonstrate ongoing compliance by:
- a. Conducting a monthly VE check of the building, in accordance with the specifications in 40 CFR 63.7112(k); the check must be conducted while all the enclosed PSH operations are operating;
 - b. The check for each affected building must be at least five minutes, with each side of the building and roof being observed for at least one minute;
 - c. If no VE are observed in six consecutive monthly checks of the building, the permittee may decrease the frequency of checking from monthly to semi-annually for that affected source; if VE are observed during any semi-annual check, the permittee shall resume checking on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly checks; and
 - d. If no VE are observed during the semi-annual check, the permittee may decrease the frequency of checking from semi-annually to annually for that affected source; and if VE are observed during any annual check, the permittee shall resume checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly checks (the source is in compliance if no VE are observed during any of these checks).

(9VAC5-80-110, 40 CFR 63.7121(a) and Table 6 to 40 CFR 63 Subpart AAAAAA)

134. **Facility Wide Conditions – Monitoring** - For each PSH operation subject to an opacity limit as specified in Table 1 to 40 CFR 63 Subpart AAAAAA, and any vents from buildings subject to an opacity limit, the permittee shall conduct a VE check according to Item 1 in Table 6 to 40 CFR 63 Subpart AAAAAA, and as follows:
- a. Conduct visual inspections that consist of a visual survey of each stack or process emission point over the test period to identify if there are VE, other than condensed water vapor.
 - b. Select a position at least 15 but not more 1,320 feet from the affected emission point with the sun or other light source generally at the observer's back.
 - c. The observer conducting the VE checks need not be certified to conduct 40 CFR 60, Appendix A, Method 9, but must meet the training requirements as described in 40 CFR 60, Appendix A, Method 22.

(9VAC5-80-110 and 40 CFR 63.7121(e))

135. **Facility-Wide Conditions – Monitoring - Visible Emissions Inspection: Fabric Filter Baghouses** – The permittee shall conduct a visible emissions inspection of each fabric filter at the facility, except for DC-07006 (which is subject to corresponding requirements pursuant to Condition 78, which are derived from 40 CFR Part 63 Subpart AAAAA), in accordance with the following procedures and frequencies:
- a. At a minimum of once per operating week, the permittee shall observe the presence of visible emissions. Each observation period shall be a minimum of one minute. If during the inspection visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9, unless timely corrective action is initiated within two hours of the visible emissions inspection such that the equipment operates with no visible emissions within 24 hours of the initial observation. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed the applicable opacity standard for the emissions unit, the VEE shall be conducted for a total of 60 minutes or until an exceedance of the opacity standard for that emission unit has been documented, whichever period is shorter. If visible emissions exceed the limit for that emission unit, then timely corrective action shall be taken such that equipment resumes operation with visible emissions not exceeding the limit for that equipment.
 - b. All visible emissions inspections shall be performed when the equipment is operating under representative conditions for the day.
 - c. If visible emissions inspections conducted during four consecutive weeks show no visible emissions, the permittee may reduce the monitoring frequency from weekly to monthly for that emission unit. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per operating week for that emission unit.

(9VAC5-80-110 and Condition 89 of the 1/29/19 PSD Permit)

136. **Facility-Wide Requirements - Recordkeeping** - The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with DEQ. These records shall include, but are not limited to:

- a. Results of all performance tests and visible emissions evaluations, including periodic inspections required by Condition 135.
- b. A copy of the Dust Control Plan required by Condition 118.

These records shall be available for inspection by DEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Condition 93 of the 1/29/19 PSD Permit)

137. Facility Wide Conditions – Recordkeeping – The permittee shall keep the following records:

- a. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart AAAAA, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
- b. The records in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
- c. Records of performance tests, performance evaluations, and opacity and VE observations as required in 40 CFR 63.10(b)(2)(viii).
- d. Records specified in 40 CFR 63.6(h)(6) for VE observations.
- e. Records required by Tables 5 and 6 to 40 CFR 63 Subpart AAAAA to show continuous compliance with each applicable emission limitation.
- f. Records which document the basis for the initial applicability determination as required under 40 CFR 63.7081.

Records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee shall keep each record onsite for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records offsite for the remaining 3 years.

(9VAC5-80-110, 40 CFR 63.7132 and 40 CFR 63.7133)

138. Facility-Wide Conditions – Testing - The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Sampling ports, safe sampling platforms, and access at the appropriate locations shall be provided when requested by DEQ.
(9VAC5-50-30 F, 9VAC5-80-110 and Condition 82 of the 1/29/19 PSD Permit)

139. Facility Wide Conditions - Testing - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9VAC5-80-110)

140. Facility Wide Conditions – Reporting - The permittee shall report each instance in which it did not meet each operating limit, opacity limit, and VE limit in Conditions 22, 36, 64, 66, 119, 120, and 121. This includes periods of startup, shutdown, and malfunction. These

instances are deviations from the emission limitations in 40 CFR 63 Subpart AAAAA. These deviations must be reported according to the requirements in 40 CFR 63.7131. (9VAC5-80-110 and 40 CFR 63.7121(b))

141. Facility Wide Conditions – Reporting - The permittee shall furnish written notification to DEQ and EPA for:

- a. The anticipated date of the initial performance test and visible emission evaluation on each vertical lime kiln (Ref. LP-VK-1 and LP-VK-2), while the kiln is burning coal or petroleum coke, as required by Conditions 40, 42, and 45, at least sixty days prior to such date.
- b. The anticipated date of any continuing compliance performance tests and/or visible emission evaluations on either vertical lime kiln (Ref. LP-VK-1 and LP-VK-2), pursuant to Conditions 43 and 46, or on any PSH equipment, at least sixty days prior to such date.
- c. The anticipated date of any continuing compliance stack tests and/or visible emission evaluations for each piece of equipment subject to Subpart OOO, postmarked at least seven days prior to such date.

(9VAC5-80-110, 40 CFR 60.675(g), 40 CFR 63.7130(a) and (d) and Condition 95 of the 1/29/19 PSD Permit)

142. Facility Wide Conditions – Reporting - The permittee must submit the compliance report for the emission units subject to 40 CFR 63 Subpart AAAAA according to the requirements listed below:

- a. Each compliance report must cover the semi-annual reporting period from January 1 through June 30 or the semi-annual reporting period from July 1 through December 31.
- b. Each compliance report must be postmarked or delivered no later than March 1 or September 1, whichever date is the first date following the end of the semi-annual reporting period.

(9VAC5-80-110, 40 CFR 63.7131(a) and (b), Table 7 to 40 CFR 63 Subpart AAAAA and Condition 96 of the 1/29/19 PSD Permit)

143. Facility Wide Conditions – Reporting – The permittee shall submit an immediate startup, shutdown, and malfunction report if it had a startup, shutdown, or malfunction during the reporting period that is not consistent with the facility's SSMP. The report shall contain actions taken for the event and shall be submitted by fax or telephone within two working days after starting actions inconsistent with the SSMP. The permittee shall also submit a letter containing the information required in 40 CFR 63.10(d)(5)(ii) within seven working

days after the end of the event unless the permittee has made alternative arrangements with the permitting authority as referenced in 40 CFR 63.10(d)(5)(iii).
(9VAC5-80-110, 40 CFR 63.7131(a) and Table 7 to 40 CFR 63 Subpart AAAAA)

144. Facility Wide Conditions - Reporting - The compliance report required in Condition 142 must contain the information as specified below:

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of report and beginning and ending dates of the reporting period.
- d. If the permittee had a startup, shutdown or malfunction during the reporting period and the permittee took actions consistent with the permittee's SSMP, the compliance report must include the information in 40 CFR 63.10(d)(5)(i).
- e. If there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and VE limit) that apply to the permittee, the compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.
- f. If there were no periods during which the Continuous Monitoring Systems (CMS) were out-of-control as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS were out-of-control during the reporting period.

(9VAC5-80-110, 40 CFR 63.7131(c) and Condition 97 of the 1/29/19 PSD Permit)

145. Facility Wide Conditions - Reporting - For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) that occurs at a 40 CFR 63 Subpart AAAAA affected source where a CMS is not used to comply with the emission limitations in the 40 CFR 63 Subpart AAAAA, the compliance report must contain the information specified in Condition 144.a through 144.d and paragraphs a and b below. The deviations must be reported in accordance with the requirements in 40 CFR 63.10(d).

- a. The total operating time of each emission unit during the reporting period.
- b. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(9VAC5-80-110, 40 CFR 63.7131(d) and Condition 98 of the 1/29/19 PSD Permit)

146. Facility Wide Conditions - Reporting - For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and VE limit) occurring at an emission unit

subject to 40 CFR 63 Subpart AAAAA (LP-VK-1, LP-VK-2, BC-07002, BC-07003, BC-07004, BC-07005, BC-07009, BC-07010, SN-07035, BN-07044, BN-07045) where a CMS is used to comply with the emission limitation in the 40 CFR 63 Subpart AAAAA, the compliance report must include the information specified in Condition 144.a through 144.d and below. This includes periods of startup, shutdown, and malfunction.

- a. The date and time that each malfunction started and stopped.
- b. The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
- c. The date, time and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8).
- d. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
- e. A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.
- f. A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- g. A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.
- h. A brief description of the process units.
- i. A brief description of the CMS.
- j. The date of the latest CMS certification or audits.
- k. A brief description of any changes in CMS, processes, or controls since the last reporting period.

(9VAC5-80-110, 40 CFR 63.7131(e) and Condition 99 of the 1/29/19 PSD Permit)

147. **Facility Wide Conditions – Reporting** - Each facility that has obtained a title V operating permit pursuant to 40 CFR 70 or 71 shall report all deviations as defined in 40 CFR 63 Subpart AAAAA in the semiannual monitoring report required by Condition 160. If the permittee submits a compliance report specified in Table 7 to 40 CFR 63 Subpart AAAAA

along with, or as part of, the semiannual monitoring report required by Condition 160, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation you may have to report deviations from permit requirements to the permit authority.

(9VAC5-80-110 and 40 CFR 63.7131(f))

148. Facility Wide Conditions – Reporting - The permittee shall furnish notification to DEQ, of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9VAC5-80-110 and Condition 113 of the 1/29/19 Permit)

Insignificant Emission Units

149. Insignificant Emission Units - The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
INS-U1	Off-Road Diesel Tank	9VAC5-80-720A		
INS-U2	On-Road Diesel Tank	9VAC5-80-720A		
INS-U3	Gasoline Tank		VOC	
INS-U4	Used Oil Tank		VOC	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110. (9VAC5-80-110)

Permit Shield & Inapplicable Requirements

150. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60 Subpart Y	Standards of Performance for Coal Preparation & Processing Plants	Applies to plants that process > 200 tons coal/day; Carmeuse's operations process < 200 tons coal/day
40 CFR 60 Subpart HH	Standards of Performance for Lime Manufacturing Plants	Applies to certain rotary lime kilns; Carmeuse's kilns are vertical kilns and do not meet the definition of rotary kiln
40 CFR 60 Subpart UUU	Standards of Performance for Calciners & Dryers in Mineral Industries	Carmeuse does not meet the rule's definition of Mineral Processing Plant because it does not process the specified minerals

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9VAC5-80-110 and 9VAC5-80-140)

General Conditions

151. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9VAC5-80-110)
152. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
153. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
154. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.
(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
155. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.
(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
156. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
157. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the

deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)

158. **General Conditions -Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

- a. The date, place as defined in the permit, and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110)

159. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9VAC5-80-110)

160. **General Conditions -Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
- b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedances of emissions limitations or operational restrictions;
 - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or

Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,

- iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9VAC5-80-110)

161. General Conditions - Annual Compliance Certification - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9VAC5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9VAC5-80-110)

162. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Valley Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 160 of this permit.
(9VAC5-80-110 F.2)

163. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall no later than four daytime business hours after the malfunction is discovered, notify the Valley Regional Office such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the [Valley](#) Regional Office.
(9VAC5-80-110 and 9VAC5-20-180)

164. **General Conditions - Failure/Malfunction Reporting** - The emission units that have continuous monitors subject to 9VAC5-40-50 C and 9VAC5-50-50 C are not subject to the 14 day written notification.
(9VAC5-20-180)

165. **General Conditions - Failure/Malfunction Reporting** - Each owner required to install a continuous monitoring system (CMS) or monitoring device subject to 9VAC5-40-41 or 9VAC5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9VAC5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the board semiannually. All semi-annual reports shall be postmarked by the 30th day following the end of each calendar semi-annual period (June 30th and January 30th). All reports shall include the following information:
- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9VAC5-40-41 B.6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

All malfunctions of emission units not subject to 9VAC5-40-50 C and 9VAC5-50-50 C require written reports within 14 days of the discovery of the malfunction.
(9VAC5-80-110, 9VAC5-20-180 C and [9VAC5-50-50](#))

- 166. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9VAC5-80-110)
- 167. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9VAC5-80-110)
- 168. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9VAC5-80-110)
- 169. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9VAC80-110, 9VAC5-80-190 and 9VAC5-80-260)
- 170. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9VAC5-80-110)
- 171. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the

permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9VAC5-80-110)

172. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G.

(9VAC5-80-110)

173. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9VAC5-80-50 through 9VAC5-80-300 was issued shall pay permit fees consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9VAC5-80-2340, adjusted annually by the change in the Consumer Price Index.

(9VAC5-80-110, 9VAC5-80-340 and 9VAC5-80-2340)

174. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-50-90 and 9VAC5-80-110)

175. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9VAC5-50-20 E and 9VAC5-80-110)

176. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1.

(9VAC5-80-110)

177. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9VAC5-80-110)

178. **General Conditions - Reopening for Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110)

179. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9VAC5-80-110 and 9VAC5-80-150)

180. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.
(9VAC5-80-110 and 9VAC5-80-160)

181. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.
(9VAC5-80-110 and 9VAC5-80-160)

182. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.
(9VAC5-80-110 and 9VAC5-80-160)

183. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9VAC5-80-110, 9VAC5-80-190 C and 9VAC5-80-260)
184. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9VAC5-80-110 and 9VAC5-80-80 E)
185. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(9VAC5-80-110 and 40 CFR Part 82)
186. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9VAC5-60-70 and 9VAC5-80-110)
187. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(9VAC5-80-110 and 40 CFR Part 68)
188. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9VAC5-80-110)
189. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to

the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.
- b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110)

Fabric Filter Compliance Assurance Monitoring Plan (DC-06016 (Lime Finishing & Loadout), DC-24038 (LF&L), and DC-24047 (LF&L))

	Indicator 1	Indicator 2	Indicator 3	Indicator 4
I. Indicator	Pressure Drop	Opacity	Visible Emissions Evaluation (optional – to determine if excursion occurs)	Periodic Structural Inspections
A. Measurement Approach	Daily observation of the differential pressure gauge.	At minimum of once per operating week, visible emissions observations conducted at each control device emission point.	Method 9 VEE accordance with 40 CFR 60, Appendix A conducted optionally to determine if an excursion occurs. Results recorded upon completion of each Method 9. If visible emissions are observed by Indicator 2 and a Method 9 VEE is not conducted, then an excursion has occurred.	Monthly external bag filter inspections by a qualified employee. Results recorded monthly. Annual internal bag filter inspections* by a qualified employee. Results recorded upon completion of each internal inspection.
II. Indicator Range	An excursion is defined as a pressure loss through the fabric filter below 0.5” water column and above 6” water column.	An excursion is defined as the presence of any visible emission from the control device unless otherwise determined by a Method 9 VEE.	An excursion is defined as an average opacity greater than the applicable opacity limits.	An excursion is defined as failure to perform monthly or annual inspection of bag filters. Excursions trigger an inspection, corrective action and a reporting requirement.
III. Quality Improvement Plan (QIP) Threshold	More than 2 excursions in a 2 week period per control device.	More than 2 excursions in a 2 week period per each control device.	A single excursion.	NA
IV. Performance Criteria A. Data Representativeness	The differential pressure gauge continuously monitors the static pressures across the fabric filter for comparison to a range indicative of proper operation.	Observation of visible emissions indicates possible damage to bag filter.	Observation of visible emissions greater than the applicable opacity limit indicates replacement or maintenance of bag filters is necessary.	The monthly external inspection shall include, for each fabric filter, structural components such as unit housing and ductwork, and the annual internal inspection* shall include each bag filter and associated internal components. Each inspection shall be conducted for signs of wear, leakage, or other deterioration that may affect efficient operation. Bags in the fabric filters shall be inspected visually for deterioration and remaining bag life monitored.
B. Verification of Operational Status	Pressure drop across the fabric filter.	Records that indicate time, facility operational status and results of each observation.	Pressure drop across each filter.	Pressure drop across each filter.

C. QA/QC Practices and Criteria	The pressure gauge is to be tested once per year to ensure proper operation.	Trained personnel perform observations.	Trained personnel shall perform Method 9. One copy of the test results shall be submitted to the Valley Regional Office within 45 days after completion.	Trained personnel perform the inspection and maintenance.
D. Monitoring Frequency and Data Collection Procedure	Inspect and recorded daily.	A minimum of once per operating week.	Upon observation of visible emissions from any fabric filter per Indicator 2.	Monthly and annual* inspections.

*Inspections shall be at least annually or at the earliest shutdown following one year from the previous inspection.